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Honeywell File No.: H0002699 Matter No.: 0017-17

## **CLAIMS**

## What is claimed is:

- 1. A bandpass filter, comprising an inductor having a core that consists essentially of an Fe-base amorphous metal alloy.
- 2. A bandpass filter as recited by claim 1, wherein said core has a substantially constant permeability over a frequency range of approximately 1 to 1000 kHz.
- 3. A bandpass filter as recited by claim 1, wherein said core has a substantially constant permeability.
- 4. A bandpass filter as recited by claim 3, wherein said substantially constant permeability exists for a field strength range of approximately -15 to +15 Oe.
- 5. An inductor comprising a core that consists essentially of an Fe-base amorphous metal alloy, and has a substantially constant permeability over a frequency range of approximately 1 to 1000 KHz.
- 6. An inductor as recited by claim 5, wherein said core permeability is substantially constant.
- 7. An inductor as recited by claim 5, wherein said substantially constant permeability is extant over a field strength range of approximately -15 to +15 Oe.

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8. In a method for limiting frequency communications, the improvement wherein there is utilized an inductor having a core consisting essentially of an Fe-base amorphous metal alloy.

- 9. A method as recited by claim 8, wherein said core has a substantially constant permeability.
  - 10. A method as recited by claim 9, wherein said substantially constant permeability is extant over a frequency range of approximately 1 to 1000kHz.
  - 11. A method as recited by claim 10, wherein said core permeability is substantially constant over a magnetic field strength range of approximately -15 to +15 Oe.